

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES MODIFYING THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 228 AT MANNING ROAD IN PRINCE GEORGE'S COUNTY DUE TO GEOMETRIC MODIFICATIONS TO THE NORTH LEG. THE GEOMETRIC MODIFICATIONS WILL INCLUDE WIDENING THE NORTH LEG, LENGTHENING THE EASTBOUND LEFT-TURN LANE AND PROVIDING A WESTBOUND DOUBLE LEFT-TURN LANE. BECAUSE OF THE GEOMETRIC MODIFICATIONS, THE LEFT-TURN PHASING ALONG MD 228 WILL BE UPGRADED TO AN EXCLUSIVE LEAD/LAG. THE SIDE STREET OPERATION WILL ALSO BE MODIFIED. PEDESTRIAN CROSSINGS ARE PROPOSED TO CROSS THE SOUTH AND EAST LEGS. APS WILL BE INSTALLED FOR THE PEDESTRIAN CROSSINGS. LED VEHICULAR TRAFFIC SIGNALS WILL BE INSTALLED ALONG MD 228. TWO EXISTING VIDEO DETECTION CAMERAS WILL BE RELOCATED ALONG WITH THE WESTBOUND OPTICOM DETECTOR EYE. MD 228 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA EIGHT-PHASE, FULL-TRAFFIC ACTUATED MODE. EXCLUSIVE LEAD/LAG LEFT-TURN PHASING IS PROPOSED FOR MD 228. THE NORTH- AND SOUTHBOUND SIDESTREET WILL OPERATE WITH EXCLUSIVE LEFT-TURN PHASING AND CONCURRENT THROUGH MOVEMENTS. A PROPOSED SOUTH LEG PEDESTRIAN CROSSING WILL RUN CONCURRENT WITH THE MAINLINE AND AN ALTERNATE SIDE STREET PHASE IS PROPOSED FOR THE EAST LEG PEDESTRIAN CROSSING.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL REMAIN.

APS WILL FUNCTION AS FOLLOWS:

FOR MD 228 (BERRY ROAD)

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS BERRY ROAD."
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

FOR MANNING ROAD

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS MANNING ROAD."
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Brian Young
Assistant District Engineer - Traffic
Phone: 301-513-7358

Mr. Augle Rebish
Assistant District Engineer - Utility
Phone: 301-513-7350

Mr. Wayne Mowdy
Assistant District Engineer - Maintenance
Phone: 301-513-7304

Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

Mr. Edward Rodenhizer
Chief, SHA Traffic Signal Shop
Phone: 410-787-7652

The Power Company Representative is:
Potomac Electric Power Company
4061 Powder Mill Road, Suite 600
Calverton, Maryland 20705
Phone: 301-931-2880

EQUIPMENT LIST 'A'

APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CAT CODE	QUANTITY	DESCRIPTION
800000	1 EA	2-WIRE CENTRAL CONTROL UNIT
800000	4 EA	ACCESSIBLE PEDESTRIAN PUSHBUTTON AND SIGN
800000	4 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	2 EA	RELOCATE EXISTING VIDEO DETECTION CAMERA
800000	1 EA	RELOCATE EXISTING OPTICOM DETECTOR
800000	112 SF	FURNISH AND INSTALL SHEET ALUMINUM SIGNS - MAST ARM MOUNT
816010	1 EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
818004	4 EA	10 FOOT BREAKAWAY PEDESTAL POLE
818041	1 EA	STEEL POLE WITH A SINGLE 60 FOOT MAST ARM
831010	1 EA	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
860284	51 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860288	375 LF	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE
866104	1 EA	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE

EQUIPMENT LIST 'B'

EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CAT CODE	QUANTITY	DESCRIPTION
120500	1 LS	MAINTENANCE OF TRAFFIC
203030	3 CY	TEST PIT EXCAVATION
585412	650 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585424	100 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
585462	575 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
800000	1 LS	REMOVE AND DISPOSE OF TRAFFIC SIGNAL EQUIPMENT
800000	1 EA	AS BUILT FOR SHA ON CADD
801004	10 CY	CONCRETE FOR SIGNAL FOUNDATION
802501	400 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805118	325 LF	4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED
805135	75 LF	3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
811011	4 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
837001	4 EA	GROUND ROD - 3/4 INCH DIAMETER BY 10 FOOT LENGTH
861105	675 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
861107	1950 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
861108	1650 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)
861116	380 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.12 AWG), TC

PHASE CHART * PHASE 5 LEAD LEFT TURN

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
PHASE 1 + 6			G	G				R	R			R	R			R	R	DW	DW	DW	DW	
PHASE 1 CHANGE			G	G				R	R			R	R			R	R	DW	DW	DW	DW	
PHASE 2 + 6			G	G				G	G			R	R			R	R	W	W	DW	DW	
PEDESTRIAN CLEARANCE			G	G				G	G			R	R			R	R	FL/DW	FL/DW	DW	DW	
PHASE 6 CHANGE			Y	Y				G	G			R	R			R	R	DW	DW	DW	DW	
PHASE 2 + 5			R	R				G	G			R	R			R	R	DW	DW	DW	DW	
PHASE 2 + 5 CHANGE			R	R				Y	Y			R	R			R	R	DW	DW	DW	DW	
PHASE 3 + 7			R	R				R	R			R	R			R	R	DW	DW	DW	DW	
PHASE 3 + 7 CHANGE	THE CONTROLLER MAY SKIP TO PHASE 3+8, PHASE 4+7 OR PHASE 4+8																	DW	DW	DW	DW	
PHASE 3 + 8			R	R				R	R			G	G			R	R	DW	DW	DW	DW	
PHASE 3 CHANGE			R	R				R	R			Y	G	G		R	R	DW	DW	DW	DW	
PHASE 4 + 7			R	R				R	R			R	R			G	G	DW	DW	W	W	
PHASE 7 CHANGE			R	R				R	R			R	R			G	G	DW	DW	DW	DW	
PHASE 4 + 8			R	R				R	R			G	G			G	G	DW	DW	DW	DW	
PHASE 4 + 8 CHANGE			R	R				R	R			Y	Y			G	G	DW	DW	DW	DW	
PHASE 4 + 8 ALT			R	R				R	R			G	G			G	G	DW	DW	W	W	
PEDESTRIAN CLEARANCE			R	R				R	R			G	G			G	G	DW	DW	FL/DW	FL/DW	
PHASE 4 + 8 ALT CHANGE			R	R				R	R			Y	Y			Y	Y	DW	DW	DW	DW	
PRE-EMPT 1			G	G				R	R			R	R			R	R	DW	DW	DW	DW	
PRE-EMPT 1 CHANGE			Y	Y				R	R			R	R			R	R	DW	DW	DW	DW	
PRE-EMPT 2			R	R				G	G			R	R			R	R	DW	DW	DW	DW	
PRE-EMPT 2 CHANGE			R	R				Y	Y			R	R			R	R	DW	DW	DW	DW	
FLASHING OPERATION	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/R	FL/R	FL/RA	FL/RA	FL/Y	FL/Y	DARK	DARK	DARK	DARK	

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

CAT CODE QUANTITY DESCRIPTION

NONE - ALL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR

LENHART TRAFFIC CONSULTING
TRAFFIC ENGINEERING & TRANSPORTATION PLANNING

331 Redwood Grove Court Millersville, Maryland 21108
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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 228 (BERRY ROAD) AT MANNING ROAD

GENERAL INFORMATION - 01

SCALE NONE DATE DEC 2007 CONTRACT NO. BW996M92

DESIGNED BY MML COUNTY PRINCE GEORGE'S
DRAWN BY MML LOGMILE 16022800.54
CHECKED BY MML T.I.M.S. NO. T-252
F.A.P. NO. TOD NO.

DRAWING NO. TS-4196A-G1 OF SHEET NO. OF

PLOTTED: \$DATETIME\$
FILE: \$FILE\$